

Patent No.:

Docket No.: 20239/0201924-US0  
(PATENT)**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Letters Patent of:  
Kazuhiko Oda et al.

Application No.: 10/539,649

Filed: June 15, 2005

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For: AMORPHOUS CARBON FILM, PROCESS  
FOR PRODUCING THE SAME AND  
AMORPHOUS CARBON FILM-COATED  
MATERIAL

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**REQUEST FOR REFUND**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Applicants hereby assert that the above-identified patent application is entitled to a refund in the amount of \$180.00, which was erroneously charged to our deposit account for the filing of an Information Disclosure Statement.

Applicants draw the Office's attention to the fact that the Information Disclosure Statement was filed before the issuance of the Final Office Action and that the references had been disclosed in a foreign office action less than three months earlier; therefore, applicants should not have been charged a fee for filing of the Information Disclosure Statement.

For the Office's convenience, attached is a copy of the United States Patent and Trademark Office Deposit Account Statement evidencing a charge of \$180.00 that was made to our deposit account for the filing of an Information Disclosure Statement. Also attached is a copy of the Japanese Office Action with English translation which proves that the office action was issued less than three months earlier. In addition, a copy of the information Disclosure Statement as filed, as

Patent No.:

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(PATENT)

well as a copy of the Electronic Acknowledgement Receipt evidencing the payment of all fees relating to the filing of the Information Disclosure Statement is attached. Accordingly, Applicants respectfully request a refund in the amount of \$180.00 to be credited to the undersigned's Deposit Account No. 04-100.

Timely and favorable consideration of this request is requested. If the Examiner has any questions pertaining to this request, the Examiner is requested to contact the undersigned attorney at the telephone number below.

Dated: August 9, 2007

Respectfully submitted,

By 

Flynn Barrison

Registration No.: 53,970

DARBY &amp; DARBY P.C.

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Attorneys/Agents For Applicant

Document code: WFEE

United States Patent and Trademark Office  
Sales Receipt for Accounting Date: 07/19/2007

WPHILLIP SALE #00000003 Mailroom Dt: 07/11/2007 040100 10539649  
01 FC : 1806 180.00 DA

Adjustment date: 08/22/2007 MGEEREM1  
07/19/2007 WPHILLIP 00000003 040100 10539649  
01 FC:1806 180.00 CR

## Deposit Account Statement

Page 1 of 2


**United States  
Patent and  
Trademark Office**
**Deposit Account Statement**

**Requested Statement Month:** July 2007  
**Deposit Account Number:** 040100  
**Name:** DARBY & DARBY P.C.  
**Attention:** ANGELINA STANTINI  
**Street Address 1:** 7 WORLD TRADE CENTER  
**Street Address 2:** 250 GREENWICH STREET  
**City:** NEW YORK  
**State:** NY  
**Zip:** 10007  
**Country:** UNITED STATES

DATE	SEQ	POSTING REF TXT	ATTORNEY DOCKET NBR	FEE CODE	AMT	BAL
07/02	1	PCT/US07/81151	2203905-WO0	8007	\$20.00	\$50,864.02
07/05	4	10488826	04703/0200956-US0	1461	\$790.00	\$50,074.02
07/05	59	79016411	MADRID.20081108	6001	\$150.00	\$49,924.02
07/09	7209	11813081	09460/0207305-US0	8021	\$40.00	\$49,884.02
07/11	18	10880985	20910/0205439-US0	1801	\$790.00	\$49,094.02
07/11	19	10880985	20910/0205439-US0	1251	\$120.00	\$48,974.02
07/12	20	11673352	04703/1200956-US1	1111	\$375.00	\$48,599.02
07/12	22	11673352	04703/1200956-US1	1311	\$200.00	\$48,399.02
07/12	115	11734835	20410/0206393-US0	2051	\$65.00	\$48,334.02
07/12	7	11569288	00630/1200597-US1	1832	\$400.00	\$47,934.02
07/12	4	2416008	20908/300A944-US0	6208	\$300.00	\$47,634.02
07/13	136	11682820	20343/1203758-US1	4011	\$75.00	\$47,559.02
07/13	137	11682820	20343/1203758-US1	2051	\$85.00	\$47,494.02
07/13	138	11682820	20343/1203758-US1	2111	\$250.00	\$47,244.02
07/13	139	11682820	20343/1203758-US1	2311	\$100.00	\$47,144.02
07/13	140	11682820	20343/1203758-US1	2203	\$180.00	\$46,964.02
07/13	141	11682820	20343/1203758-US1	2202	\$25.00	\$46,939.02
07/18	87	11426830	06727/1205059-US2	8021	-\$40.00	\$46,979.02
07/18	59	11671794	20345/1203508-US1	8021	-\$40.00	\$47,019.02
07/18	46	10623431	CYPR 100 CIP CON	1253	-\$1,020.00	\$46,039.02
07/19	13	PCT/US07/84102	2204163-WO0	1703	\$60.00	\$47,979.02
07/19	3	10539649	20239/0201824-US0	1808	\$180.00	\$47,799.02
07/23	2	11168913	04394/100M848-US3	2201	\$100.00	\$47,899.02
07/23	3	11168913	04394/100M848-US3	2814	\$65.00	\$47,834.02
07/26	4	PCT/US08/61519	2202525-WO0	8007	\$20.00	\$47,814.02
07/27	49	10503289	04242/0201658-US0	1202	-\$100.00	\$47,714.02

*Errors Charge*

1

**Reference No. 10110228**

**Dispatch No. 250313**

**Dispatch Date: May 29, 2007**

**Notification of Reasons for Rejection**

**Patent Application No.: Patent Application No. Tokugan 2001-342218**

**Drafting Date: May 22, 2007**

**JPO Examiner: Naohiro Yoshida**

**8028 4G00**

**Representatives/Applicant: Kosaku Inaoka (and another)**

**Applied Law: Patent Law Section 29(1), Section 29(2), Section 29-2, Section 36**

**This application is rejected for the following reasons. An opinion, if any, should be submitted within 60 days from the dispatched date of the notification.**

**Reasons**

**1. The inventions in the claims listed below of the subject application should not be granted a patent under the provision of Patent Law Section 29(1)(iii) since the inventions are the inventions described in the following publications distributed in Japan or foreign countries or the inventions which were publicly available through electrical communication lines prior to the filing of the subject application.**

2. The inventions in the claims listed below of the subject application should not be granted a patent under the provision of Patent Law Section 29(2) since it could have easily been made by persons with ordinary skill in the art to which the inventions pertain, on the basis of the inventions described in the following publications which were distributed in Japan or foreign countries or the inventions which were publicly available through electrical communication lines prior to the filing of the subject application.

3. The inventions in the claims listed below of the subject application should not be granted a patent under the provision of Patent Law Section 29-2 since they are identical with the inventions described in the specifications originally attached to the request of the application for patent listed below, which were filed prior to the filing date of the subject application and was published for opposition (publication of the gazette in which the patent is described) or laid open for application after the filing the subject application, the inventors of the subject application are not identical with the inventors who have made said inventions and the applicant of the subject application is also not identical with the applicant of said applications for patent at the time of filing the subject application.

4. In this application, description of claims does not comply with the requirements under Patent Law Section 36(6)(ii).

Note (The list of cited documents, etc. is shown below)

**[Claims 1 to 3; Reasons 1 and 2; Cited Documents 1 and 2]**

In the cited document 1, there is a description to the effect that hydrogen-free carbon film is vapor-deposited at room temperature under the pressure of  $1 \times 10^{-3}$  Pa by means of a pulsed laser ablation of pure graphite target.

In the cited document 2, there is a description to the effect that carbon film is vapor-deposited under the pressure of  $10^{-10}$  Pa or  $5 \times 10^{-6}$  Pa by means of a laser ablation of graphite target.

Methods for the manufacture of carbon film mentioned in the cited documents 1 and 2 are not different at all from the method for the manufacture of carbon film mentioned in claim 6 of this application and, therefore, the carbon film prepared in the cited documents 1 and 2 has the same properties mentioned in claims 1 to 5, 7 and 8 of the present application.

**[Claims 1 to 8; Reasons 1 and 2; Cited Document 3]**

In claims 18 and 19 of the cited document 3, a coat where density is 2.6 to  $3.6 \text{ g/cm}^3$  comprising carbon only is mentioned while, in claim 7, there is a description that the Knoop hardness is 1,800 to 8,000.

In the paragraphs [0058] and [0085], there is a description of a method for the manufacture of such a carbon film in which solid carbon is used as a target and a vacuum arc discharge vapor deposition (cathode arc ion plating) is carried out *in vacuo* without introduction of gas. However, that is just the same as the method for the manufacture of carbon film mentioned in claim 6 of

the present invention.

[Claims 1 to 5 and 7; Reasons 1 and 2; Cited Document 4]

In the cited document 4, there is a description to the effect that carbon film is obtained by a method where electronic beam is irradiated to a graphite target *in vacuo* ( $10^{-6}$  Torr) so that carbon atom is sublimed and, at the same time, laser beam is irradiated. Particularly in Examples and in Table 1, there is a description that a hard carbon coat where density is 2.6 to 3.3 g/cm<sup>3</sup> and Knoop hardness is 4,000 to 7,000 is prepared by changing the laser power density. In view of said manufacturing method, it is recognized that the resulting product has the properties mentioned in claims 2 to 4.

[Claim 1; Reasons 1 and 2; Cited Document 5]

In the sample No. 27, for example, in the paragraph [0057] of the cited document 5, a hard carbon film where density is 3.17 g/cm<sup>3</sup> is mentioned.

[Claim 1; Reason 3; Cited Documents 6 and 7]

In the sample No. 17, Table 2, paragraph [0032] of the specification attached to the initially-filed application of the cited document 6, a hard carbon film where density is 3.0 g/cm<sup>3</sup> is mentioned.

In claim 5 of the specification attached to the initially-filed application of the cited document 7, a hard carbon film where the amount of carbon included is 99atm% or more and density is 2.3 to 3.7 g/cm<sup>3</sup> is mentioned.



**[Claim 4: Reason 4]**

In claim 4, there is a description reading "... formed from substantially carbon atoms only". However, it is ambiguous to what amount the word "substantially" refers and, as a whole, the scope of the invention is unclear.

**List of the cited documents, etc.**

1. TIE-JUN LI, et al, Experimental Study of Hydrogen-free DLC film Deposition by XeCl (308nm) pulsed laser ablation, Proc SPIE Int Soc Opt Eng, 2000, Vol. 3885, Page. 323-330
2. J. DIAZ, et al, Raman spectroscopy of carbon films grown by pulsed laser evaporation of graphite, DIAMOND AND RELATED MATERIALS, 1992, Vol. 1, p. 824-827
3. Patent Application Publication No. 2001-192864
4. Patent Application Publication No. H02-022458
5. Patent Application Publication No. H07-215795
6. Patent Application No. 2001-126827 (Patent Application Publication No. 2002-322555)
7. Patent Application No. 2000-186765 (Patent Application Publication No. 2002-008217)

**Record of results of prior art search**

- Technical fields to be searched:

6

IPC C23C14/00-14/58

C01B31/00-31/36

Database name JSTPlus, SCIENCE DIRECT

The record is not a component of the reasons for rejection.

Please contact as follows if you have any inquiries on the contents of  
this Notification and/or wish to have an interview.

The 3rd department, Division of Inorganic Chemistry, Naohiro Yoshida

TEL: 03-3581-1101 (extension No. 3416),

FAX: 03-3580-6905

整理番号:101I0228 発送番号:250313 発送日:平成19年 5月29日 1

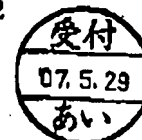
## 拒絶理由通知書

期 限 '07年 7 月30 日

住友電工整理番号	技 術 石 井
D-64194	庁 期 限
	07/7/28

特許出願の番号 特願2001-342218  
 起案日 平成19年 5月22日  
 特許庁審査官 吉田 直裕 3028 4G00  
 特許出願人代理人 稲岡 耕作 (外 1名) 様  
 適用条文 第29条第1項、第29条第2項、第29条の2  
 、第36条

SPIN済



この出願は、次の理由によって拒絶をすべきものである。これについて意見があれば、この通知書の発送の日から60日以内に意見書を提出して下さい。

## 理 由

- 理由1. この出願の下記の請求項に係る発明は、その出願前に日本国内又は外国において、頒布された下記の刊行物に記載された発明又は電気通信回線を通じて公衆に利用可能となった発明であるから、特許法第29条第1項第3号に該当し、特許を受けることができない。
- 理由2. この出願の下記の請求項に係る発明は、その出願前に日本国内又は外国において、頒布された下記の刊行物に記載された発明又は電気通信回線を通じて公衆に利用可能となった発明に基いて、その出願前にその発明の属する技術の分野における通常の知識を有する者が容易に発明をすることができたものであるから、特許法第29条第2項の規定により特許を受けることができない。
- 理由3. この出願の下記の請求項に係る発明は、その出願の日前の特許出願であって、その出願後に特許掲載公報の発行又は出願公開がされた下記の特許出願の願書に最初に添付された明細書、特許請求の範囲又は図面に記載された発明と同一であり、しかも、この出願の発明者がその出願前の特許出願に係る上記の発明をした者と同一ではなく、またこの出願の時において、その出願人が上記特許出願の出願人と同一でもないので、特許法第29条の2の規定により、特許を受けることができない。
- 理由4. この出願は、特許請求の範囲の記載が下記の点で、特許法第36条第6項第2号に規定する要件を満たしていない。

記 (引用文献等については引用文献等一覽参照)

[請求項1-8 理由1、2 引用文献1、2]

整理番号:10110228 発送番号:250313 発送日:平成19年 5月29日 2

粋黒鉛ターゲットのパルスレーザーアブレーションによって蒸着したことが記載されている。

引用文献2には、 $10^{-10}$  Paの圧力又は $5 \times 10^{-8}$  Paの圧力で、黒鉛ターゲットのレーザーアブレーションによって炭素膜を蒸着したことが記載されている。

引用文献1、2に記載された炭素膜の製造方法は、本願請求項6に記載された炭素膜の製造方法と何ら相違する点がないため、引用文献1、2において得られた炭素膜は、本願請求項1-5、7、8に記載された物性を有しているものと認められる。

[請求項1-8 理由1、2 引用文献3]

引用文献3の請求項18、19には、密度が $2.6 \sim 3.6 \text{ g/cm}^3$ の實質的に炭素のみからなる被膜が記載されており、請求項7には、ヤング強度が1800以上8000以下であることが記載されている。

また、[0058]段落、[0085]段落には、そのような炭素膜の製造方法として、ターゲットとして固体炭素を用いて、ガスを導入せずに真空排気した状態で真空アーク放電蒸着（カソードアークイオンプレーティング）を行うことが記載されており、本願請求項6に記載された炭素膜の製造方法と何ら相違する点がない。

[請求項1-5、7 理由1、2 引用文献4]

引用文献4には、真空中（ $10^{-6}$  Torr）でグラファイトターゲットに電子ビームを照射して炭素原子を昇華させると同時にレーザー光を照射する方法によって炭素膜を得ることが記載されている。特に、実施例及び表1には、レーザーパワー密度を変化させることによって、密度 $2.6 \sim 3.3 \text{ g/cm}^3$ 、ヤング硬さ4000～7000の硬質炭素被膜を得たことが記載されている。そして、その製造方法からみて、請求項2-4に記載された物性を有しているものと認められる。

[請求項1 理由1、2 引用文献5]

引用文献5の[0057]段落の例えば試料No. 27には、密度 $3.17 \text{ g/cm}^3$ の硬質炭素膜が記載されている。

[請求項1 理由3 引用文献6、7]

引用文献6の願書に最初に添付された明細書の[0032]段落の表2の試料No. 17には、密度 $3.0 \text{ g/cm}^3$ の硬質炭素膜が記載されている。

引用文献7の願書に最初に添付された明細書の請求項5には、炭素の含有量が99 atm%以上であり、密度 $2.3 \sim 3.7 \text{ g/cm}^3$ の硬質炭素膜が記載されている。

整理番号:101I0228 発送番号:250313 発送日:平成19年 5月29日 3/E

[請求項4 理由4]

請求項4には、「実質的に炭素原子のみから形成されている」と記載されているが、「実質的に」なる語句がどの程度を意味するのか不明であり、全体として発明の範囲が不明確である。

引用文献等一覧

1. TIE-JUN LI, et al, Experimental Study of Hydrogen-free DLC film  
Deposition by XeCl(308nm) pulsed laser ablation,  
Proc SPIE Int Soc Opt Eng, 2000年, Vol.3885, Page.323-330
2. J.DIAZ, et al, Raman spectroscopy of carbon films grown by pulsed  
laser evaporation of graphite, DIAMOND AND RELATED MATERIALS,  
1992年, Vol.1, p.824-827
3. 特開2001-192864号公報
4. 特開平02-022458号公報
5. 特開平07-216795号公報
6. 特願2001-126827号(特開2002-322555号)
7. 特願2000-186765号(特開2002-008217号)

先行技術文献調査結果の記録

・調査した分野 IPC C23C14/00-14/58  
C01B31/00-31/36

DB名 JSTPlus、SCIENCE DIRECT

この先行技術文献調査結果の記録は拒絶理由を構成するものではありません。  
この拒絶理由通知の内容に関するお問い合わせがございましたら下記までご連絡ください。

特許審査第三部無機化学 吉田直裕

TEL. 03(3581)1101 内線3416 FAX. 03(3580)6905

Docket No.: 20239/0201924-USO  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Kazuhiko Oda et al.

Application No.: 10/539,649

Confirmation No.: 6622

Filed: June 15, 2005

Art Unit: 1775

For: AMORPHOUS CARBON FILM, PROCESS  
FOR PRODUCING THE SAME AND  
AMORPHOUS CARBON FILM-COATED  
MATERIAL

Examiner: Archene A. Turner

**INFORMATION DISCLOSURE STATEMENT (IDS)**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

This Information Disclosure Statement is submitted in accordance with 37 C.F.R. 1.97, 1.98, and it is requested that the information set forth in this statement and in the listed documents be considered during the pendency of the above-identified application, and any other application relying on the filing date of the above-identified application or cross-referencing it as a related application.

1. This IDS should be considered, in accordance with 37 C.F.R. 1.97, as it is filed:  
(Check one of the boxes A-D)

Application No.: 10/539,649

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- ☐ A. within three months of the filing date of the above-identified national application or within three months of the entry into the national stage of the above identified national application
- ☐ B. before the mailing date of a first office action on the merits, or a first office action after filing a request for continued examination.
- ☒ C. after (A) and (B) above, but before final rejection or allowance, and Applicants have made the necessary statement in box "i" below or paid the necessary fee in box "ii" below.

(check one of the boxes "i" and "ii" below:)

- ☒ i. Counsel states that, upon information and belief, each item of information listed herein was (check one of boxes (a) or (b))
- ☒ (a) first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS; or
- ☐ (b) not cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of undersigned after making reasonable inquiry, was not known to any individual designated in 1.56(c) more than three months prior to the filing of this IDS.
- ☐ ii. A check for the fee set forth in 1.17(p), presently believed to be \$180, is enclosed.
- ☐ D. after (A), (B) and (C) above, but before payment of the issue fee: Applicant petitions under 37 C.F.R. 1.97(d) for the consideration of this IDS. Under 37 CFR 1.17(p) a check in the amount of \$180.00 is enclosed. Counsel certifies that, upon information and belief, each item of information listed herein was

(check one of the boxes "a" and "b" below:)

Application No.: 10/539,649

Docket No.: 20239/0201924-US0

- ☐ (a) first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS; or
- ☐ (b) was not cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of undersigned after making reasonable inquiry, was not known to any individual designated in 1.56(c) more than three months prior to the filing of this IDS.

2. In accordance with 37 C.F.R. 1.98, this IDS includes a list (e.g., form PTO/SB/08) of all patents, publications, or other information submitted for consideration by the office, either incorporated into this IDS or as an attachment hereto. A copy of each document listed is attached, except as explained below.

(check boxes A, B and/or C and fill in blanks, if appropriate.)

- ☐ A. Pursuant to the Notice issued by the United States Patent and Trademark Office dated July 11, 2003 waiving the requirements of 37 C.F.R. § 1.98(a)(2)(i), a copy/copies of the United States Patent on PTO/SB08 is/are not being submitted.
- ☐ B. Document(s) \_\_\_\_\_ is (are) deemed substantially cumulative to document(s) \_\_\_\_\_, and, in accordance with 1.98(c), only a copy of each of the latter documents is enclosed.
- ☐ C. Certain documents were previously cited by or submitted to the Office in the following prior applications, which are relied upon under 35 U.S.C. 120:

<<INSERT SERIAL NO. & FILING DATE>>

Applicant identifies these documents by attaching hereto copies of the forms PTO-892, PTO-1449 and/or PTO/SB/08 from the files of the prior application(s) or a fresh PTO/SB/08 listing these documents, and request that they be considered and made of record in accordance with 1.98(d). Per 37 CFR 1.98(d), copies of these documents need not be filed in this application.

- ☒ 3. Cite Nos. 1 - 5 under Foreign Patent Documents are not in the English language. In accordance with 1.98(c), Applicant states:



Application No.: 10/539,649

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- ☒ An English translation of each document (or of the pertinent portions thereof), or a copy of each corresponding English-language patent or application, or English-language abstract (or claim) is enclosed.
- ☐ The requirement for a concise explanation of the relevance of any foreign language document is satisfied by the attached search report; citation of the documents cited in the search report shall not be construed as an admission that they are or are considered to be, material to patentability of the subject matter claimed herein (See MPEP §609).
- ☐ A concise explanation of the relevance of document(s) \_\_\_\_\_ is set forth as follows: [Insert concise explanation of relevance]
- ☐ A concise explanation of the relevance of document(s) \_\_\_\_\_ can be found on page(s) \_\_\_\_\_ of the specification.
- ☐ A concise explanation of document(s) \_\_\_\_\_ can be found on the attached sheet.
- ☐ 4. No explanation of relevance is necessary for documents in the English language (see reply to Comments 67 in the preamble to the final rules; 1135 OG 13 at 20).
- ☒ 5. Other information being provided for the examiner's consideration follows:

A Japanese Office Action, dated May 29, 2007, which issued during the prosecution of Japanese Application No. 2001-342218 which corresponds to the present application.

6. In accordance with 37 C.F.R. 1.97(g) and (h), the filing of this IDS should not be construed as a representation that a search has been made or that information cited is, or is considered to be, material to patentability as defined in §1.56 (b), or that any cited document listed or attached is (or constitutes) prior art. Unless other-wise indicated, the date of publication indicated for an item is taken from the face of the item and Applicant reserves the right to prove that the date of publication is in fact different.

Early and favorable consideration is earnestly solicited.

Application No.: 10/539,649

Docket No.: 20239/0201924-USO

The Commissioner is authorized to charge any deficiency of up to \$300.00 or credit any excess in this fee to Deposit Account No. 04-0100.

Dated: July 11, 2007

Respectfully submitted,

By /s/ Flynn Barrison (53,970)

Thomas J. Bean

Registration No.: 44,528

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PTO/BB/06a (05-07)

Approved for use through 09/30/2007. OMB 0851-0031

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (Not for submission under 37 CFR 1.99)	Application Number		10539649	
	Filing Date		2006-06-16	
	First Named Inventor		Kazuhiko Oda	
	Art Unit		1776	
	Examiner Name		Not Yet Assigned	
	Attorney Docket Number		20239/0201924-USO	

U.S. PATENTS								
Examiner Initial <sup>a</sup>	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear		
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1	1	2001192864	JP		2001-07-17	Sumitomo Electric Ind Ltd		<input checked="" type="checkbox"/>
2	2	02022458	JP		1990-01-25	Matsushita Electric Ind Co Ltd		<input checked="" type="checkbox"/>
3	3	07215795	JP		1995-08-15	Kyocera Corp		<input checked="" type="checkbox"/>

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
(Not for submission under 37 CFR 1.99)

Application Number	1053984
Filing Date	2005-06-15
First Named Inventor	Kazuhiko Oda
Art Unit	1775
Examiner Name	Not Yet Assigned
Attorney Docket Number	20238/0201924-US0

4	4	2002322555	JP		2002-11-08	Kobe Steel Ltd	<input checked="" type="checkbox"/>
5	5	2002008217	JP		2002-01-11	Hitachi Metals Ltd	<input checked="" type="checkbox"/>

If you wish to add additional Foreign Patent Document citation information please click the Add button

**NON-PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>3</sup>
	1	Li, et al., 2000. "Experimental Study of Hydrogen-free DLC film Deposition by XeCl(308nm) pulsed laser ablation". Proc. SPIE Int. Soc. Opt. Eng. 3985: 323 - 330.	<input type="checkbox"/>
	2	Diaz, et al., 1982. "Raman spectroscopy of carbon films grown by pulsed laser evaporation of graphite". Diamond and Related Materials 1: 824 - 827.	<input type="checkbox"/>

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**EXAMINER SIGNATURE**

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
(Not for submission under 37 CFR 1.99)

Application Number	1053864
Filing Date	2005-08-15
First Named Inventor	Kazuhiko Oda
Art Unit	1775
Examiner Name	Not Yet Assigned
Attorney Docket Number	20239/0201924-US0

**CERTIFICATION STATEMENT**

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

- ☒ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

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- ☐ See attached certification statement.
- ☐ Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.
- ☐ None

**SIGNATURE**

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/FB/ Flynn Barrison (53,970)	Date (YYYY-MM-DD)	2007-07-11
Name/Print	Thomas J. Bean	Registration Number	44528

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<b>EPS ID:</b>	1859900
<b>Application Number:</b>	10539649
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	6622
<b>Title of Invention:</b>	Amorphous carbon film, process for producing the same and amorphous carbon film-coated material
<b>First Named Inventor/Applicant Name:</b>	Kazuhiko Oda
<b>Customer Number:</b>	7278
<b>Filer:</b>	Jay Philip Lessler/Lillian Garcia
<b>Filer Authorized By:</b>	Jay Philip Lessler
<b>Attorney Docket Number:</b>	20239/0201924-US0
<b>Receipt Date:</b>	11-JUL-2007
<b>Filing Date:</b>	15-JUN-2006
<b>Time Stamp:</b>	12:31:31
<b>Application Type:</b>	U.S. National Stage under 35 USC 371

**Payment information:**

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Document Number	Document Description	File Name	File Size(Bytes) /Message Digest	Multi Part (.zip)	Pages (if appl.)
1	Information Disclosure Statement (IDS) Filed	01165918.pdf	38427 <small>516d202006d407 8D F3D7C86627C33 8B-1086d</small>	no	5
<b>Warnings:</b>					

<b>Information:</b>					
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2	Information Disclosure Statement (IDS) Filed	01185786.pdf	885570 <small>7c93e0cf7f3d3c0a5d3d3ec92d 69b9ee53</small>	no	4
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3	Foreign Reference	01185785.pdf	320862 <small>2c7f9b8cc9ed1c3c3c2fca7e00aa0631e 7ef79402</small>	no	9
<b>Warnings:</b>					
<b>Information:</b>					
4	Foreign Reference	01185799.pdf	1745363 <small>e0cd428da913ad3c4d3d371cde8ba710af 00be9eb0</small>	no	28
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<b>Information:</b>					
5	Foreign Reference	01185800.pdf	198136 <small>65188f19bf23dc0249e1c23ac707032db 6a5820</small>	no	5
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<b>Information:</b>					
6	Foreign Reference	01185806.pdf	858566 <small>c083e4c228202d1c002324aeed5d7e7e 18b05028</small>	no	13
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<b>Information:</b>					
7	Foreign Reference	01185811.pdf	637304 <small>2a833ab1e0f030056bb1c37ae4d30c03e 604d2111</small>	no	9
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<b>Information:</b>					
8	Foreign Reference	01185814.pdf	487199 <small>bac3285ce0d0837ae75e1638187eaaa0 63d4e41d8</small>	no	7
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<b>Information:</b>					
9	NPL Documents	01185817.pdf	229638 <small>f3170998131770fcdd2204b72e4d34c07 a4d4e41d8</small>	no	4

<b>Warnings:</b>					
<b>Information:</b>					
10	NPL Documents	01165820.pdf	417056	no	8
			<small>pdf 709K0558AC78m70mm0x7 and 18m71739 999 10037</small>		
<b>Warnings:</b>					
<b>Information:</b>					
<b>Total Files Size (in bytes):</b>				5776218	
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PTO/SB/97 (04-97)

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Application No. (if known): 10/639,649

Attorney Docket No.: 20239/0201924-USO

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**INTELLECTUAL PROPERTY LAW**DATE: August 9, 2007FILE #: 20239/0201924-USO  
Application No. 10/539,649

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